Multimedia Based English Vocabulary Lesson in The Elementary School: A Classroom Action Research (CAR) Approach

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ABSTRACT

English vocabulary mastery in elementary school is considered low, proven by students' shared understanding of English. Teaching English vocabulary to children is not an easy problem. If taught by force, it can cause children to become bored quickly. For the results of learning English better, the teacher must create a learning process that is more fun and more practical. Learning multimedia-based English vocabulary is an alternative that can be taken. Using computer media can help children (in this case, elementary school students) to improve their ability in mastering English vocabulary and attract elementary school students to learn more fun. This study aims to create a basic learning model of multimedia-based English vocabulary in elementary school students in improving essential English vocabulary mastery. This research was conducted on elementary school students in the city of Makassar. This study used Classroom Action Research techniques, a learning application in animated media pictures and writing. Using multimedia is expected to improve the mastery of English vocabulary in elementary schools quickly. From the research results obtained, with two cycles of learning using multimedia alone, about 90% of students have been able to read, interpret, and write vocabulary correctly, which if only using conventional techniques, there are still about 73% of students who cannot.

Keywords: Learning, multimedia, vocabulary, Classroom Action Research.

1. INTRODUCTION

Language plays a vital role in students' intellectual, social, and emotional development and supports students' success in learning all fields of study. In this era of globalization, all modern science and technology use English. English is a world language indispensable in facing globalization today [1]–[4], so it is important to learn early.

English is an international language that has a vital role in our lives because the language has become an obligation to be studied by various levels of society, ranging from students to the public. English is always encountered verbally and in writing in all aspects of the association. Because of this, English needs to be studied by all levels of society [5] so that not a few who attend formal and non-formal education institutions are supported by quality manuals tailored to their needs.

Teaching English vocabulary recognition to children through the learning process at school should be introduced early [6]. Early age is a golden age where everything can be easily and quickly removed. Language believes that the earlier the child learns a foreign language, the easier it is for the child to master the language and make it easier for children to acquire language faster without much difficulty than adults.

Education, especially schools, have a learning system that can increase students' curiosity about English [7], including vocabulary. The inclusion of English as one of the subjects in elementary school is excellent because this can trigger the child's interest in learning English early. One crucial factor in learning English for children is a teacher who cares about the needs of their students because the implementation of learning English for children is still a lot of weaknesses and disadvantages.

In addition to mastery and qualified English language skills, a teacher must also master teaching English for children [8]. [9]. Students often feel bored learning English because they do not know the vocabulary. Vocabulary is an essential factor in learning English. When children start learning and stop because of vocabulary, they become lazy to learn, especially with inappropriate teaching techniques.

Learning English in schools includes listening, speaking, reading, and writing. To improve English language skills, one must increase vocabulary or strengthen the vocabulary of these four aspects.
Vocabulary mastery is an essential thing that students in learning English must master. Students’ lack of vocabulary is influenced by several factors, including lack of reading because there is no interest in reading. Therefore, to improve students’ vocabulary, the teacher must use appropriate and exciting media [10], [11], namely multimedia-based media that uses an application in the media.

This multimedia application that uses symbols or images on a computer is expected to help elementary school children. It aims to improve children’s ability to understand vocabulary around the school and home environments. This application is designed to be interesting for school children to more enjoyable learning. For vocabulary learning in the classroom to be more meaningful for students, it is necessary to use teaching techniques for elementary school children, namely multimedia-based learning media. Using this media, it is expected that students are more interested in learning English through an application, especially in basic vocabulary in the surrounding environment (school and home).

2. METHOD

2.1. Design

This research is classroom action research (CAR). This research was carried out systematically on various actions taken by the teacher, ranging from planning to assessment in the classroom aimed at improving the basic vocabulary of multimedia-based English to be even better. Action research is directly related to field practice in realistic situations [12], [13]. The scope of the research is minimal, and action research is more aimed at making changes to all participants and changing the situation of the place of the research. This is done to achieve continuous improvement in practice.

2.1.1. Planning

Planning is a design stage that is used to improve English vocabulary mastery. The design is made based on the results of observations that have been made in previous learning. Planning is done to make learning plans that are interesting and achieve learning objectives. Make the image card media used during the learning process. Make evaluation questions to measure the achievement of English vocabulary mastery.

2.1.2. Observation

During the learning process in the classroom, there are two activities carried out simultaneously, namely treatment of actions and observations.

2.1.2.1. Treatment of actions

The treatment of actions taken in the classroom is based on the learning scenario that has been made. Learning scenarios that have been made are flexible and can change when they are implemented. This is adjusted to the class conditions when learning takes place. The implementation of research actions in the form of submission and evaluation.

Submission of the subject matter begins with an apperception regarding the material being taught. Apperception is done to provoke students’ curiosity about the lessons delivered. Students are introduced to vocabulary around their school environment with the help of multimedia media. At first, students are asked to see the pictures displayed and listen to the words spoken by the teacher. Students are asked to mimic the words while watching the media images displayed on the LCD. Students are asked to read and write down the words displayed by the teacher in each student’s notebook.

Moreover, evaluation is done in writing. Students work on evaluation questions that the teacher has made. The evaluation questions done by students contain the vocabulary that has been taught.

2.1.2.2. Observation

Observations are made during the learning process. This observation was carried out in conjunction with the treatment process. Observations were made to find out the learning process of English vocabulary in the classroom during one meeting.

2.1.3. Reflection

Reflection is done after analyzing the implementation in Cycle 1. Reflection is done to assess the learning that has been done in the first cycle that has been done. Reflection is done as a material for improvement in the following learning, namely in Cycle 2. Reflection is used as a guide for planning in Cycle 2.

2.2. Population and Data Retrieval Techniques

The research subjects in this study were twenty-one grade IV students of one of the Elementary Schools in Makassar, South Sulawesi, Indonesia. Data collection techniques are directly adjusted to the observation format used in child observation in the learning process of essential English vocabulary recognition through multimedia-based media. Documentation was also used in the form of photographs in carrying out the activity, the results of teacher performance, and the focused conditions of the child’s learning in the learning process.

2.3. Research Instrument

Researchers use research instruments are tools used by researchers in collecting data so that their work is more accessible, and the results are better, more accurate, and systematic so that they are easier to process. This research instrument collects data about basic vocabulary learning in English based on multimedia for fourth-grade elementary school students. The multimedia-based
primary vocabulary learning instrument grid is as follows:

Variable: Basic English Vocabulary around the classroom/school environment.

Indicators:
- Read vocabulary
- Interpret vocabulary
- Write vocabulary

Rating Scale:
- Score 1: If students cannot read, interpret, and write vocabulary
- Score 2: If students read, interpret, and write vocabulary with the help of the teacher
- Score 3: If students read, interpret, and write vocabulary hesitantly
- Score 4: If students read, interpret, and write correctly but not smoothly
- Score 5: If students read, interpret, and write correctly and smoothly

2.4. Data Analysis

This data analysis was calculated through the presentation of overall learning outcomes. The researchers used the formula \( P = \frac{\Sigma}{N} \times 100\% \). \( P \) is a percentage, \( \Sigma \) is the average score, \( N \) is total participants, and 100% is the constant value.

3. RESULTS AND DISCUSSION

3.1. Description of Initial Assessment Data

The researchers conducted pre-tests and interviewed the teacher and the principal about the state of the school and students who would be taught, especially in their English vocabulary mastery abilities that were still lacking. From the results of the pre-test before being given action, the condition of the ability in the essential vocabulary mastery of English which includes the vocabulary around the school environment, is seen from three indicators, namely, (1) students' ability in reading vocabulary, (2) students' ability in interpreting vocabulary, and (3) students' ability in writing vocabulary.

By using a scale of 1-5, with the provisions: Score 1 if students cannot read, interpret, and write vocabulary, score 2 if students read, interpret, and write vocabulary with the help of the teacher, score 3 if students read, interpret, and write vocabulary with hesitation, score 4 if students read, interpret, and write correctly but not smoothly, Score 5 if students read, interpret, and write correctly and smoothly.

From the table data above, it can be seen in this pre-cycle that students' ability in English vocabulary mastery is still at 73% reading vocabulary with the help of the teacher, in interpreting 73% of vocabulary with the help of the teacher, and writing 70% English vocabulary with teacher assistance. So, it can be seen that there are still many children who cannot still master English vocabulary. From the acquisition of existing pre-cycle values, the researchers want to improve the ability of English vocabulary mastery with multimedia-based equipped with animation, images, and sound so that learning can be more interactive and fun for students.

Table 1. Recapitulation of students' ability scores in English vocabulary mastery before being given action

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Rating</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Read Vocabulary</td>
<td>0%</td>
</tr>
<tr>
<td>Interpret Vocabulary</td>
<td>0%</td>
</tr>
<tr>
<td>Write Vocabulary</td>
<td>0%</td>
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</tbody>
</table>

This Class Action Research was carried out in two cycles. Learning activities in this classroom action research include initial, core, and final activities. In the initial activity, the teacher conveys the learning objectives to be achieved as a reference for students. The teacher carries out multimedia-based English vocabulary learning in the core activities, which contains the names of objects in the surrounding school environment equipped with drawing, animation, and sound media to improve English learning. Students pay attention to the media shown in pictures, sounds, and nouns that appear in the application displayed and mimicked the vocabulary or sentences spoken by the teacher/researcher.

3.2. Data of Cycle 1

Based on the initial assessment data obtained, it can be seen that the ability of essential English vocabulary mastery in students is still low. One solution is by utilizing multimedia media in the form of images, sounds, and animation. Learning is arranged so that students' vocabulary mastery can be improved. The results of this initial assessment are a reference for researchers in making action treatment plans. In this research, there are four stages done, namely:

3.2.1. Planning

The researcher designed implementation planning and assisted the class teacher, including making multimedia-based learning preparing instruments and observation sheets. Learning the basic vocabulary of English-based multimedia is carried out five times in each cycle. Moreover, at the time of the basic vocabulary learning activities, multimedia-based English that provides action is their respective classroom teacher and researcher as an observer.

3.2.2. Implementation

Under the opinion of Eisele in the implementation of giving actions in the implementation of learning, it is necessary to create an environment that can develop
concepts from multimedia-based vocabulary learning, which include:

- Immersion (sink): the child's environment must be rich in written language.
- Demonstration: the child learns through the model or by looking at the model of the teacher and the child doing the activities of reading, writing, listening, and speaking every day.
- Expectation (hope): creates an atmosphere that hopes children will learn and work under child development. It needs to prepare various sources or facilities, activities, and books.
- Responsibility: children must be responsible for their learning. The teacher is a facilitator, and the child takes responsibility. Children work by writing on a board or display around the room. Children move and run freely, and there is the little direction from the teacher.
- Employment: children are actively involved in meaningful learning.
- Approximations: children take risks and are free to experiment from their encouragement and feel happy about the results of their efforts.
- Feedback/response: the child receives positive and specific feedback or feedback from the teacher and peers.

3.2.3. Observation

Researchers and English language teachers made observations as instructors—the researcher's position as a passive participant to observe the course of the learning process. Observations were made in conjunction with improving students' English vocabulary mastery. Observations are made during the learning process. Observations consist of observation of teacher activities during the learning process and observation of student activities during the learning process. Observations on the treatment of actions focused on observations improve the basic vocabulary skills of English, whether children's vocabulary skills can improve after applying multimedia-based learning methods. The aspects of multimedia learning based on basic vocabulary include the ability to (1) read vocabulary, (2) interpret vocabulary, and (3) write vocabulary. To activate students, the teacher/researcher asks several questions according to the material discussed and appoints students to demonstrate media use. When group discussion activities, students are more enthusiastic about the media displayed.

3.2.4. Reflection

From the observations made with pre-test and post-test in this first cycle, there was an increase in primary vocabulary mastery in multimedia-based English, including reading vocabulary, interpreting vocabulary, and writing vocabulary. From the observations that have been done in this study, there are weaknesses and strengths, and as for the advantages, namely: (1), the child does not feel burdened with learning activities, (2) in addition to understanding this method also teaches children's writing skills, (3) not bound by a textbook. While the weaknesses (1) the teacher must understand the stages of this vocabulary improvement learning with multimedia-based, (2) need special skills of teachers to plan these learning activities in an integrated manner.

3.3. Data of Cycle II

In this action research, four stages must be passed in cycle I: planning, implementing actions, observing, and reflecting. The results of assessments and reflections in this cycle become a reference for researchers in making action planning plans. The researcher designed the treatment planning for this action and assisted class teachers, which included supporting learning media, instruments, and observation sheets.

From the observations made with pre-test and post-test in this second cycle, there was an increase in essential vocabulary mastery based on multimedia, including reading vocabulary, interpreting vocabulary, and writing vocabulary. The following is the acquisition of the percentage of the increase in multimedia-based vocabulary mastery skills.

<table>
<thead>
<tr>
<th>Table 2. The overall percentage of learning English vocabulary</th>
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<tbody>
<tr>
<td>Cycle</td>
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<tr>
<td></td>
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<tr>
<td>Pre Test</td>
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<tr>
<td>Cycle I</td>
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<tr>
<td>Cycle II</td>
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Explanation:
- Score 1: Students cannot read, interpret and write vocabulary
- Score 2: Students can read, interpret and write vocabulary with the help of the teacher
- Score 3: Students can read, interpret and write the vocabulary doubtfully
- Score 4: Students can read, interpret and write vocabulary correctly but not smoothly
- Score 5: Students can read, interpret and write vocabulary correctly and smoothly

The table data above shows the improvement of students' ability in multimedia-based English vocabulary mastery, which is equipped with animation, sound, and picture media. Using the right image media can improve English learning about vocabulary. Before using multimedia-based media in learning English, their learning activities have been guided by textbooks and use...
methods that are less fun for students, so the material discussed earlier often forgets. Children have not been able to think abstractly. Children find it difficult to face abstract problems [14]. With the media in the form of images, animation and sound can be more enjoyable learning in the classroom [15].

4. CONCLUSION

The essential vocabulary mastery of multimedia-based English has increased. This can be seen by the increasing ability of students in reading, translating, and writing English vocabulary. The implementation of multimedia-based learning equipped with picture media, animation, and sound can improve students’ vocabulary mastery, as evidenced by the increasing number of vocabularies mastered by students in each cycle. Vocabulary mastery techniques in learning English vocabulary need more varied models, methods, and media to make learning more enjoyable.

After conducting this research, students are expected to be more diligent in writing vocabulary and pay attention to explanations from teachers so that student learning outcomes can improve. Students are also expected to read more vocabulary to improve students vocabulary mastery. Also, teachers are expected to optimize learning media in delivering material to increase student enthusiasm and make lessons more varied.

REFERENCES


